

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
10 June 2004 (10.06.2004)

PCT

(10) International Publication Number
WO 2004/048988 A1

- (51) International Patent Classification⁷: **G01R 33/28**, A61B 5/055
- (74) Agents: **FLECHSLER**, Insa et al.; Amersham Health AS, Nycoveien 1-2, P.O. Box 4220 Nydalen, N-0401 Oslo (NO).
- (21) International Application Number: PCT/NO2003/000395
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 27 November 2003 (27.11.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 20025711 27 November 2002 (27.11.2002) NO
- (84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, RU, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicant (*for all designated States except US*): **AMERSHAM HEALTH AS** [NO/NO]; Intellectual Property Dept., Nycoveien 1-2, P.O. Box 4220 Nydalen, N-0401 Oslo (NO).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): **AXELSSON**, Oskar [SE/SE]; Amersham Health R & D AB, P.A. Hanssons v. 41, S-205 12 Malmö (SE). **GOLMAN**, Klaes [DK/DK]; Amersham Health R & D AB, P.A. Hanssons v. 41, S-205 12 Malmö (SE). **MÅNSSON**, Sven [SE/SE]; Amersham Health R & D AB, P.A. Hanssons v. 41, S-205 12 Malmö (SE). **PETERSSON**, Stefan [SE/SE]; Amersham Health R & D AB, P.A. Hanssons v. 41, S-205 12 Malmö (SE).
- Published:**
- with international search report
 - before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: METHOD OF MAGNETIC RESONANCE IMAGING

(57) **Abstract:** The present invention provides methods for passive visualisation of invasive devices by employing a hyperpolarised solution of a high T1 agent having a T1 value of at least 5 seconds at a field strength in the range of 0.001-5 T and a temperature in the range of 20-40 °C. Devices and instruments particularly useful for being employed in the methods are also provided as well as use of the methods in imaging, surgery and therapy.

WO 2004/048988 A1